



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Price Field Office
125 South 600 West
Price, Utah 84501

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RECEIVED

JAN 10 2000

DIVISION OF OIL, GAS & MINING

3809
UTU-76642
(UT-070)

Daniel C. Shepard
GoldTerra
4088 East Airport Road
P.O. Box 783
Price, Utah 84501

JAN -7 2000



Dear Mr. Shepard:

On December 7, 1999, this office received your proposed plan of operations (POO) for the Blue Castle Mine. The POO involves a surface mining operation for gold from the Mancos Shale Formation located southeast of Price, Utah. We have reviewed the POO and have determined that the following changes or additions must be provided before we can proceed with preparing an Environmental Assessment for the proposed project:

- 1) Clearly delineate all existing and proposed routes of access to be utilized. Describe any road construction, improvements, widening, and maintenance that would be required. What equipment and personnel would be required? What would be the width of new access routes? Would fill material or sand and gravel be required for road construction? If so, how much of these materials would be needed and from where would the materials be supplied? How would transportation be maintained for roads constructed in the Mancos Shale during wet periods?
- 2) What surface structures and facilities would be constructed on the site? Describe how all structures and facilities would be utilized. Describe in detail how all equipment within the facilities would be utilized. What amount of equipment would be used in each structure and facility? Provide dimensions and detailed site diagrams of all structures and facilities. Describe how each structure and facility would be constructed. What equipment and quantity of materials would be utilized in the construction? In addition, an operator must comply with the Federal regulations at 43 CFR 3715 for the surface use and occupancy of public lands for the development of locatable minerals. GoldTerra has not provided the information required by these regulations.
- 3) Provide detailed information about the nature of the gold deposits in the Mancos Shale. Does the gold occur disseminated throughout the Mancos Shale or is it concentrated in specific layers or zones? What geologic factors control the occurrence of gold? What is the character of the gold such as size, shape, weight, and fineness? Has any exploration been conducted in the project area and have assays been performed on the samples collected? What evidence is there that the ore is 200'+ thick? Provide locations of any exploration drilling which has been conducted within the permit area. What is the estimated amount of reserves in the area? What is the average assay of the reserves in ounces of gold per ton?
- 4) What is the viability of the project in terms of the reserves identified and the costs of the mining and milling operations?
- 5) How is the nature of the gold occurrences in the Mancos Shale amenable to a flotation process?

What is the design criteria for the flotation circuit? Provide the flotation circuit flowsheet. What is the number, size, and arrangement of the flotation cells? Was the design criteria based on laboratory analysis obtained from representative samples? If so, provide a copy of the analysis. What are the specific functions and compositions of the flotation reagents? What is the quantity of chemicals to be utilized in the flotation process for a given amount of production? What would be the composition of the froth concentrate? How is the gold separated from the froth concentrate? What amount of reagent is lost in the flotation process? Are any of the chemicals utilized in the process classified as hazardous materials? Provide the Mineral Safety Data Sheets for all the chemicals utilized in the flotation process. What measures would be taken to comply with applicable laws and regulations regarding hazardous wastes? Would storage require construction of concrete bunkers, berms, liners, double-walled tanks, etc.? What amount of the reagents would be transferred to the tailings ponds? How would the gangue be removed from the flotation cells and transferred to the tailings ponds? What is required for the reagents to become chemically innocuous? What is the production capacity of the mill on a daily, monthly, and annual basis? What is the amount of concentrates and tailings that would be produced on a daily, monthly, and annual basis?

- 6) Provide an explanation of how all equipment would be utilized in the mining operation. Estimate the numbers and type of equipment which would be utilized at different production levels. Estimate the amount of fuel, oil, and lubricants required and the quantity of fuels, oil, and lubricants that would be stored onsite. Provide details on how fuels, oil, and lubricants would be stored and handled onsite and the safeguards taken to prevent spillage. Furnish the number, type, and size of containers for fuels, oil, and lubricants. Identify the number and size of trucks required for haulage of ore, fuel, water, and waste and how many truck loads or round trips per day. Explain how and when explosives would be utilized and what amount of explosives are anticipated. Address the storage and safeguard of explosives on the site.
- 7) Describe in detail the sequence of mining and the development of terraces for a typical area. Explain how the development of the pit would progress. Would the terraces be developed from the top of the slope to the bottom or from the bottom of the slope to the top? What would be the height of the highwall and the width of the terrace? How would a dozer or trackhoe be utilized for removing the ore from the *steep* slopes? Address the need for any temporary stockpiles in the mining area. How would the production of the dozer be coordinated with the production of the loader? Would the dump trucks be loaded on the terrace or on a wider area off the terrace? Estimate the amount of surface disturbance that would result due to mining on a daily, monthly, and annual basis.
- 8) What is the number of personnel needed in the mining and milling operations? Where and how would sanitary waste be disposed of? Where would parking be provided for personal vehicles?
- 9) How much water would be utilized in the mining and milling operations? Also, how much water would be utilized for dust suppression on the roads? From where and how would the water be provided? Would water be stored on the site?
- 10) How would electricity for the milling operation be provided? Would a powerline be constructed across public lands? If so, a right-of-way permit is required.
- 11) Where are the *initial* tailings ponds indicated in the text of the POO. What is the dimension of these ponds and how long would they be utilized. What is the depth of the large tailings ponds? What materials would be utilized for lining the tailings ponds? How much water would be contained in the ponds during normal daily operations? As the tailings ponds fill with tailings, how would the capacity of the tailings ponds for containing the runoff from large storm events be affected. Why is runoff from Watershed A directed to the tailings ponds and runoff from Watershed B allowed to flow into the natural drainage channel? Describe in detail the safeguards that would be utilized for containing

all water and tailings within the ponds during all periods of operation. Describe the function of the 2 silt fences that would be located before the boundary of the permit area.

- 12) Provide the schedule for removal and reclamation when operations end. Describe the procedures for reclaiming the terrace areas. Reclamation of the tailings ponds should address removal of the linings.
- 13) On Plate III included in the POO there is a rectangular area delineated by a red dashed line. What is the purpose of this area?
- 14) Who would approve a stormwater pollution prevention plan? Measures to prevent stormwater pollution should be incorporated into the POO.

Due to the complexity and scope of this project, it is anticipated that we will require additional information regarding the proposed project after reviewing the information GoldTerra submits in accordance with this letter. If you have any questions, contact Tom Rasmussen at 435-636-3627.

Sincerely,

/s/ THOMAS E. RASMUSSEN **Acting**

Richard L. Manus
Field Manager

cc: Anthony Gallegos
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